LABOKLIN
LABOR FÜR KLINISCHE DIAGNOSTIK GMBH & CO. KG

Laboklin GmbH & Co. KG , Steubenstraße 4 , 97688 Bad Kissingen

To
Wilhelmiina Virolainen
Hippiäisenkuja 5
80400 Ylämylly
Finnland

Report No.:	**2305-W-76216**
Date of arrival:	25.05.2023
Date of report:	07.06.2023
Testing started:	25.05.2023
Testing completed:	07.06.2023
Status of the report:	Final report

Species:	Dog
Breed:	Australian Shepherd
Gender:	Female
Name:	Patchcoat Dyani
Stud book No.:	ER37367/21
Chip No.:	934000011283805
Date of birth / Age:	22.05.2021
Type of sample:	Swab
Date sample was taken:	15.05.2023
Sampler:	ELL Tiina Tretjakov (1778)
Owner / Animal-ID:	Virolainen, Wilhelmina
IT No. / Report-ID:	---

Degenerative Myelopathy - PCR

Result: Genotype N/N (exon 2)

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the high-risk factor for DM in exon 2 of the SOD1-gene.

Trait of inheritance: autosomal-recessive

Please note: In the Bernese Mountain Dog breed the mutation in exon 1 of the SOD1-gene also occurs in correlation with DM.

Hyperuricosuria - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for HUU in the SLC2A9-gene.

Trait of inheritance: autosomal-recessive

Brachyury - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for brachyury.

Trait of inheritance: autosomal-dominant

LABOKLIN
LABOR FÜR KLINISCHE DIAGNOSTIK GMBH & CO. KG

Neuronal Ceroid Lipofuszinosis (NCL) -PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for NCL in the CLN6-gene.

Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian Shepherd Please note: nomenclature of this variant was changed from CLN8 to CLN6 at 25/04/19

Neuronale Ceroid Lipofuszinose (NCL) adult onset - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for NCL in the CLN8-gene.

Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian Shepherd

MDR1 gene variant - PCR

Result: Genotype N/N (+/+)

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for MDR in the ABCB1-gene.
Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian Shepherd, Border Collie, Elo, German Shepherd, Longhaired Whippet, McNab, Old English Sheepdog, Rough/Smooth Collie, Shetland Sheepdog, Silken Windhound, Wäller, White Shepherd

Please note: in individual cases, heterozygous dogs can show clinical signs!

The DNA-test is run according to the publication of Mealey et al. (2001) "Ivermectin sensitivity in collies is associated with a deletion mutation of the mdr1 gene." and detects the mutation MDR1 nt230 (del4).

prcd-PRA - PCR *

Result: Genotype N/N (A)

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for prcd-PRA in the PRCD-gene.

Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian cattle dog, American Cocker Spaniel, American Eskimo Dog, Australian Shepherd, Australian Stumpy Tail Cattle Dog, Barbet, Bearded Collie, Bolognese, Bolonka Zwetna, Chesapeake Bay Retriever, Chihuahua, Chinese Crested, English Cocker Spaniel, English Shepherd, Entlebucher Mountain Dog, Finnish Lapphund, German Spitz, Giant Schnauzer, Golden Retriever, Jack Russell Terrier, Karelian Beardog, Kuvasz, Lagotto Romagnolo, Lapponian Herder, Labrador Retriever, Markiesje, Norwegian Elkhound, Nova Scotia Duck Tolling Retriever, Parson Russell Terrier, Portugese Water Dog, Poodle, Schipperke, Swedish Lapphound, Silky Terrier, Spanish Water Dog, Swedish Lapphund, Wäller, Yorkshire Terrier.

LABOKLIN
LABOR FÜR KLINISCHE DIAGNOSTIK GMBH & CO. KG

Collie Eye Anomaly (CEA) - PCR *

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype-allele. It does not carry the causative mutation for CEA in the NHEJ1-gene.
Trait of inheritance: autosomal-recessive

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian Kelpie and Shepherd, Bearded Collie, Border Collie, Boykin Spaniel, Hokkaido, Lancashire Heeler, Longhaired Wippet, Nova Scotia Duck Tolling Retriever, Rough/Smooth Collie, Shetland Sheepdogs, Silken Windhound

Hereditary Cataract - PCR

Result: Genotype N/N

Interpretation: The examined animal is homozygous for the wildtype allele. It does not carry the risk factor for hereditary cataract in the HSF4 gene.

Trait of inheritance: unknown

Scientific studies found correlation between the mutation and symptoms of the disease in the following breeds: Australian Shepherd, Wäller

The current result is only valid for the sample submitted to our laboratory. The sender is responsible for the correct information regarding the sample material.The laboratory can not be made liable. Furthermore, any obligation for compensation is limited to the value of the tests performed.

There is a possibility that other mutations may have caused the disease/phenotype. The analysis was performed according to the latest knowledge and technology.

The laboratory is accredited for the performed tests according to DIN EN ISO/IEC 17025:2018. (except partner lab tests).

Breeding club discounts were granted for discountable services!

Sampling:

The following impartial person (veterinarian, breed warden, or similar) signed the form for the sampling and identity check of the animal:

ELL Tiina Tretjakov (1778)

LABOKLIN
LABOR FÜR KLINISCHE DIAGNOSTIK GMBH & CO. KG

These results are based on the sample material submitted to our laboratory.

This was suitable if not stated otherwise. The submitter is responsible for the accuracy of the information regarding the sample. This report can only be transmitted in toto and unchanged. Doing otherwise requires written permission from Laboklin GmbH & Co. KG.

LABOKLIN is an officially accredited laboratory according to DIN EN ISO/IEC 17025:2018, DAkkS No. D-PL-13186-01-01 and D-PL-13186-1-02. The accreditation applies to all test procedures listed in the accreditation certificate.

*: test performed by partner laboratory

Fr.Dipl.-Biol. Bärbel Gunreben
Abt. Molekularbiologie

***** END of report *****

Laboklin App